

Remarks/Arguments

Claims 1, 22-39 and 42-47 remain in the application.

Claims 43-47 have been cancelled.

In the Office Action mailed July 8, 2004, the Examiner objected to the wording of the paragraph beginning at page 1, line 4 which describes the cross-reference of the application to other related applications. This has been corrected as suggested by the Examiner. Also, the Examiner objected to the improper use of brackets in making amendments to the specification at line 2 of the paragraph beginning at page 7, line 24 and at page 9, line 5. These also have been corrected as shown in the Amendments to the Specification section of this document.

The Examiner had further objected to the organization of the detailed description. This has been corrected as shown in the Amendments to the Specification section of this document, by inserting the description of FIGS. 31-35 starting at page 23, line 25 through page 26, line 5 at page 36, line 17, and then deleting the description from page 23, line 25 through page 26, line 5. In other words, the description of FIGS 31-35 has simply been moved to another location in the specification. No new matter has been entered.

Turning to the objection to the drawings, the Examiner has objected because FIGURE 15 appears twice in the "corrected" PCT/US99/13592 Application Publication.

A set of remembered sheets for FIGS. 16-35 (replacement sheets 12-22) are attached which delete the second FIGURE 15 which previously was on sheet 12.

The Examiner also expressed concern that the tear seams 316 in FIGURE 26 were different one from the other (front of door vs. rear of door) and different from FIGURE 28 which show the cross section of the door further weakened by a notch. As an initial matter, it is not

clear what the Examiner's concern is regarding the drawings designation of tear seam 316 in FIGS. 26 and 28, since they are both tear seams with a weakened area relative to surrounding area. Applicant would certainly be willing to accommodate the Examiner's concerns, but it is believed that the drawings comply with all requirements.

On that note, the benefit of the elongated tubular channels 35 at each side of the tear seam 316 provides additional section stiffness to that local area on either side of the tear seam which promotes tearing of the thinner section 316. As recited at page 33 of the corrected version of PCT/US99/13592, starting at line 30, "A pair of elongated tubular channels; shown at 350 in FIGURE 26, are formed by gas-assist injection molding along either side of the tear seam 316 to further ensure that tearing occurs only along the tear seam 316. The tubular channels 350 increase structural rigidity adjacent the tear seam 316 without requiring a large mass of material". In the case of FIGURE 26, the application is directed at an instrument panel using a relatively large air bag which has to travel a considerable distance to encounter an occupant. The size of the bag, often protecting for a third person in the center of the front seat, and the distance traveled require that a large bag be inflated by a heavy charge of propellant which fractures the tear seam because of the difference in local section modulus between the tubular channels 350 which are reinforced due to their shape and the thinner and weaker seam area 316. As shown, the tubular channel 350 is integrally formed with a canister support bracket 352 (see page 34, line 7) which is attached to the canister. The inflation of the air bag preferably causes initiation of tearing along the rear edge of the door (the most right hand tear seam 316 in FIGURE 26) and the tearing propagates around to the tear seam 316 closer to the windshield of the vehicle (the left hand tear seam 316 shown in FIG 26).

In contrast, FIGURE 28 is directed at a tear seam for a door panel (see page 35, lines 14-18). In this case, where the door panel is generally of a very flat shape, and a small air bag of lower inflation force is used (since the hip of the occupant is only a few inches away and a small area of the occupant is intended to be contacted), notching of the substrate to further weaken it in comparison to the tubular channels may be preferred. Any combination of thinning and weakening of the tear seam area 316 may be possible for either door panel or instrument panel, or other trim panels, to urge fracture, tearing and propagation of tearing in a substrate.

However, as noted, the designation of tear seam 316 in both FIGS. 26 and 28 is believed correct in that they are both tear seams.

Turning to the claims, the Examiner has indicated that claims 1 and 22-39 would be allowable if rewritten to overcome the objection of 35 USC 112, paragraph 2. Claims 1 and 36 have been amended as suggested by the Examiner (in claim 1 at lines 9, 10 and 11 changing “dispenser” to “canister”, and in claim 36, line 9, inserting “thereof” after “outer surface”). No new matter is believed to have been added nor is it believed that the amendments herein alter the scope of the invention. Accordingly, it is believed that claims 1 and 22-39 are now in condition for allowance. Allowance at an early date is respectfully requested.

Turning to claims 42-47, the Examiner, in the Office Action dated July 8, 2004, has rejected claims 43-47 under 35 USC 101 for double patenting. Claims 43-47 have been cancelled thereby rendering this rejection as moot.

Claim 42 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18 and 38 of United States Patent No. 5,941,558 in view of DiSalvo, et al., United States Patent No. 4,893,833. The Examiner states that “claims 18 and 38 of ‘558 do not recite a support structure to which the reaction plate is connected.

DiSalvo, et al. teaches a vehicle panel 12 provided with a support structure 36 to which a reaction plate 18 is connected". The Examiner concludes that from this teaching it would have been obvious to modify claims 18 and 38 of the U.S. '558 by providing the panel with support structure to which the reaction plate is connected in order to provide a strong and secure mounting for the reaction plate.

Applicant understands the Examiner's argument that it would have been obvious to modify claims 18 and 38 to provide the panel with support structure to which the reaction plate may be connected. However, claim 42 of the present application is directed at among other things, an air bag deployment door integrally formed in a vehicle panel, a reaction plate, **including a pivotable panel portion configured to pivot outward under the force of air bag inflation, and the reaction plate connected to support structure.** Neither claims 18 or 38 of '558 or DiSalvo, et al. '833 teach or suggest all of these elements. This pivotable panel portion of the reaction plate and its function are described at page 11, line 16 to page 12, line 11 of the present application.

Claim 18 and 38 of '558 also do not include the limitation that the **reaction plate** be connected to **support structure**. Page 11, lines 16-19 of the present application describe this option, where the reaction plate is attached to the air bag dispenser apparatus, "However, in other embodiments, the reaction plate 28 may be pivotally attached to a portion of a panel 12 or other surrounding **support structure**."

Turning to DiSalvo, et al. ('833), this reference is directed at "a closure panel member configured to be interfit into said opening", and **not an integrally formed air bag door**. Further, this reference does not include a reaction plate (such as the present application, which moves independently of the door so as not to arrest or restrict opening of the door – see page 12,

lines 4-11 of the present application). In the first embodiment of '833, the closure 10 comprises a combination of a core body 14 of Styrofoam™ **bonded** to an inner supporting layer 18 of aluminum. In the second embodiment of '833, the molded plastic member 108 includes a series of transverse inner ribs 110, but again does not teach or suggest "a reaction plate including a pivotable panel portion configured to pivot outward under the force of air bag inflation, the **reaction plate connected to support structure**". In DiSalvo, et al. ('833) in the first embodiment, a rearwardly projecting convoluted shaped extension strip 26 (hinging means) of the aluminum support layer 18 is secured by way of mounting posts 36 to a structural support plate 38 underlying the instrument panel 12. In the second embodiment, a molded plastic member includes a hinging flange 118 secured to the opposite side of the air bag canister 124. DiSalvo, et al. ('833) simply does not contemplate the need for or use of a reaction plate.

In other words, since the U.S. '558 reference does not teach the use of reaction plate attached to support structure, and since DiSalvo et al '833 does not teach a reaction plate with a pivotable panel portion, it is believed that the obviousness double patenting rejection of claim 42 is not proper.

Turning to the obviousness double-patenting rejection of claim 42 of the present application over claim 19 of United States Patent No. 6,203,056, these two claims are directed at distinctly different embodiments of the invention. In the case of claim 42 of the present invention, the reaction plate is disposed between the air bag and the air bag deployment door, and may act independently of the door, the door controlled by a tether (see FIGS. 1, 4, 7, 12-17). This reaction plate is not connected directly to the door.

In claim 19 of '056, the embodiments of FIGS. 26 and 30-34 therein appear captured where the reaction plate is attached to the door by a screw, acting as a combined reaction plate

and integral tether. The Examiner recognized this feature, but concluded that it would have been obvious to delete this additional limitation on the grounds that the elimination of an element/limitation is within the level of ordinary skill in the art.

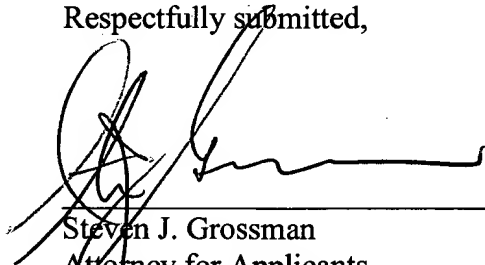
Applicant respectfully submits that the argument that it would have been obvious to eliminate a feature in the prior art which is disclosed as a required feature in a claim, without any indication in the art itself that the elimination of such feature was capable of being removed, or desirous of being removed, or that there may have been some motivation to remove such feature, does not support an argument that obviousness-double patenting is present.

In consideration of the amendments to the claims and the remarks hereinabove, Applicant respectfully submits that all claims currently pending in the application are believed to be in condition for examination. Allowance at an early date is respectfully solicited.

In the event the Examiner deems personal contact is necessary, please contact the undersigned attorney at (603) 668-6560.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Steven J. Grossman', is written over a horizontal line.

Steven J. Grossman

Attorney for Applicants

Reg. No. 35,001

Grossman, Tucker, Perreault & Pfleger, PLLC

55 South Commercial Street

Manchester, New Hampshire 03101

Tel.: (603) 668-6560

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 8, 2004, at Manchester, New Hampshire.

By Carol McClelland
Carol McClelland

Amendments to the Drawings

The attached sheets of drawings reflect the removal of duplicate FIGURE 15 on original sheet 12. FIGS. 16-35, attached, now reflect corrected numbering for the drawing sheets.

Attachments – Replacement Sheets 12-22